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10/044,036	01/11/2002	Christopher Kikta		7935

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EXAMINER

DIVECHA, KAMAL B

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,036

Applicant(s)

KIKTA ET AL.

Examiner

KAMAL B. DIVECHA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 32-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20041206, 20050321</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-31 are presented for examination.

In response filed on September 14, 2005 to the restriction/election requirement, applicant cancelled claims 32-66.

Priority

The claim for the priority to the provisional application filed 1/12/2001 is acknowledged.

Information Disclosure Statement

The information disclosure statement (IDS) submitted is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

The incorporation of essential material in the specification (page 8) by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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1. Claims 1-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation “said application controllers”, “said network” and “said profile” in the claim. There is insufficient antecedent basis for this limitation in the claim. Claim fails to indicate which one of the plurality of application controllers the claim is referring to.

Claim 1 is further considered indefinite because it fails to clearly point out and indicate the teaching wherein said control interface includes a database of at least one profile for an application controller type. It is unclear as to whether the database is associated with at least one profile for an application controller of type or at least one profile is associated with a corresponding database for a controller type.

Claims 2-31 are rejected for the same reasons as set forth in claim 1.

Claim 4 recites the limitation “said means for receiving” in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation “said explicit message” in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation “said database of profiles” in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 12-18 recites the limitation “said local control interface” in the claim. There is insufficient antecedent basis for this limitation in the claims.

Claim 19 recites the limitation “said application controllers”, “said network” and “said control variables” in the claim. There is insufficient antecedent basis for this limitation in the

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claim. Claim fails to indicate which one of the plurality of application controllers the claim is referring to.

Claim 31 recites the limitation "said controllers" in the claim. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Pascucci et al. (hereinafter Pascucci, U. S. Patent No. 5,550,980).

As per claim 19, Pascucci discloses a control system for automated applications in a building environment (fig. 14) comprising: a communications network (fig. 15 item #15-7); a plurality of applications controllers connected to said communications network, each of said application controllers providing automated operation of a corresponding application, each of said application controllers being capable of providing automated operation of said corresponding controllers in accordance with a plurality of control variables (fig. 14 item #14-15, 14-17, 14-19, col. 51 L50-67, col. 35 L30-66); a control interface connected to said network (fig. 14 item #14-1), said control interface including means for transmitting explicit messages to each of said application controllers, said explicit messages including commands for adjusting said control variables of said application controller (col. 70 L54 to col. 71 L56, col. 51 L50-67; col. 35 L1-19); wherein each of said application controllers include means for processing said commands received from said control interface in said explicit messages and means for adjusting

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a value of said control variables in accordance with said command, whereby said control interface is capable of controlling operation of said application controllers (col. 31 L21-39, col. 41 L42-55, col. 77 L66 to col. 78 L15 and col. 85 L40 to col. 86 L14).

As per claim 23, Pascucci discloses a system comprising a network server interface, said network server interface including a means for monitoring and controlling operation of said control system over an Internet connection (col. 26 L44-52 and fig. 16 and col. 32 L5-67).

As per claim 26, Pascucci discloses a system wherein said ping for at least one of said application controllers includes data for updating said application controller with current system information, said application controller including a means for updating certain of said control variables in accordance with said current system information (col. 41 L42-55).

As per claim 27, Pascucci discloses a system wherein said response transmitted by at least one of said application controllers includes data relevant to at least one other of said application controllers, said control interface including means for transmitting said data included in said response to said other of said application controllers (col. 31 L20-30, col. 57 L25-62, col. 58 L37-57 and col. 44 L6-12, since application specific controllers are attached to network controller unit through N2 bus for communication).

As per claims 20-22 and 24-25, they recite the similar limitations as in claims 2-3, 11 and 9-10. Therefore claims 20-22 and 24-25 are rejected for the same reasons as set forth in claims 2-3, 11 and 9-10 (see below).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pascucci et al. (hereinafter Pascucci, U. S. Patent No. 5,550,980).

As per claim 28, Pascucci discloses a system wherein control interface includes means for generating an alarm (col. 35 L25-31, col. 62 L44-67) for reporting of predefined conditions (note application controller fails to respond is also considered a predefined condition), however Pascucci does not teach the process of generating an alarm if any of said application controllers fails to respond to said ping (a message or command). But it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Pascucci in order to generate the alarm if application controller fails or does not respond to ping, command or a message. One of ordinary skilled in the art would have been motivated because it would have provided a mechanism of notifying high level features and/or operator of changes to act as a trigger mechanism (Pascucci, col. 35 L25-30).

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4. Claim 1-6, 9-18 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pascucci et al. (hereinafter Pascucci, U. S. Patent No. 5,550,980) in view of Pouchak et al. (hereinafter Pouchak, Pub. No.: 2003/0005086 A1).

As per claim 1, Pascucci discloses a control system for controlling automated applications in a building environment comprising: a communications network (fig. 15 item #15-7); a plurality of applications controllers connected to said communications network, each of said application controllers including means for controlling operation of a corresponding automated device, each of said application controllers including a controller type (fig. 10 item #10-1, fig. 15 item #15-15, 15-19, fig. 17 item #17-13 and fig. 64); a control interface connected to said communications network, said control interface including a database of at least one profile for an application controller type (col. 33 L55 to col. 34 L26, fig. 15 item #15-1, 15-3, 15-5, fig. 11 item #11-3, fig. 20 item #20-11, 20-2, fig. 64 item #64-14, 64-30); a means for conveying said controller type of said application controller from said application controller to control interface (col. 48 L23-30); a means for configuring application controller based on a profile corresponding to said controller type of said application controller (col. 36 L40-65, col. 42 L8-35), however, Pascucci does not disclose a self-configuration means for providing automated configuration of each of said application controller on said network.

Pouchak, from the same field of endeavor discloses the process of automatic self-configuration of the controllers on the network (page 1 [0004], page 9 [0105-0108], page 10 [0120-0128]). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pascucci in view of Pouchak, in order to include a self-configuration means for automatic configuration of the application controller, since Pouchak

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explicitly teaches and discloses the process of automatic self-configuring of the controllers on the network.

One of ordinary skilled in the art would have been motivated because it would have provided a mechanism for automatic node addressing and self-configuration for multi-node control systems (Pouchak, page 9 [0105], page 10 [0129]).

As per claim 2, Pascucci discloses a system wherein application controllers controls operation of said corresponding automated device in accordance with at least one variable (col. 34 L26-43); and wherein control interface includes means for controlling operation of said application controller by specifying a value of said variable (fig. 20 item #20-1, col. 41 L28-64, col. 64 L66 to col. 65 L10 and col. 78 L13-20).

As per claim 3, Pascucci discloses a system wherein the database of at least one profile for a controller type is further defined as including a plurality of profiles for application controllers of different controller types (col. 67 L9-10, fig. 64 item #64-14, 64-30 and col. 33 L49-67).

As per claim 4, Pascucci discloses a system wherein said control system includes means for transmitting explicit messages to said application controllers (fig. 14 item #14-7, 14-1, 14-13 and fig. 12 item #12-3, 12-5, 12-1, col. 58 L39-42); and said application controllers including a means for receiving said explicit messages from said control interface (col. 58 L39-44 and fig. 10 item #10-3, 10-1), however Pascucci does not teach that each of said explicit messages includes an identification unique to a specific one of said application controllers and does not disclose a means for recognizing only those of said explicit messages which include an identification unique to said application controller in which said means for receiving resides.

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Pouchak discloses a means for recognizing only those of explicit messages which include an identification unique to said application controller (page 1 [0004] and page 4-5 [0074]).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Pascucci in view of Pouchak, in order to include a means for recognizing only those explicit messages which include an identification unique to application controller, since Pouchak explicitly teaches this process. One of ordinary skilled in the art would have been motivated because it would have enabled the communication of control information between nodes utilizing subnet and node addressing (Pouchak, see abstract).

As per claim 5, Pascucci discloses a system wherein said means for transmitting explicit messages include means for incorporating said value of said variable into said explicit message (col. 85 L40-64).

As per claim 6, Pascucci discloses a system wherein said database of profiles includes input, output and configuration data structures for application controllers (col. 34 L3-60, col. 33 L55-67, col. 37 L30-41).

As per claim 9, Pascucci discloses a system wherein control interface includes a means for monitoring a status of each of said application controllers (col. 85 L40-67), said means for monitoring including a means for periodically transmitting a ping to each of said application controllers (fig. 14 item #14-1, fig. 15 item #15-1, 15-27) and a means for receiving a response to said ping from each of said application controllers (fig. 15 item #15-9, fig. 9A item #9-27, 9-7 and fig. 10 item #10-7).

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As per claim 10, Pascucci discloses a system wherein each of said application controllers includes a means for receiving said ping from control interface (col. 31 L21-30) and a means for transmitting a response to said ping to said control interface (col. 31 L21-39 and col. 56 L1-51).

As per claim 11, Pascucci discloses a system wherein said plurality of application controllers includes at least one HVAC application controller, at least one lightning application controller and at least one access control application (col. 85 L65-67, fig. 15 item #15-1 and fig. 10 item #10-1).

As per claim 12, Pascucci discloses a system wherein control interface includes a database of application control software images (fig. 64 item #64-14); and means for downloading said control software images into at least one of said application controllers (fig. 64 item #64-40, fig. 33 item #33-5 and col. 30 L15-48).

As per claim 13, Pascucci discloses a system comprising a means for downloading said application controller software images into said local control interface from an external source, whereby said application controller software images can be upgraded (col. 30 L15-48).

As per claim 14, Pascucci discloses a system with plurality of applications controllers (fig. 14 and fig 15), and it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to conclude that Pascucci's application controllers are preprogrammed with the networking and configuration software enabling said at least one application controller to receive and install application controllers control software images downloaded by local interface, because these features are deemed to be inherent and without the control software image and basic network configuration of application controller, the Pascucci's system would not operate.

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As per claim 15, Pascucci discloses a system wherein control interface includes a means for downloading a local control interface control software image into said local control interface (col. 30 L15-48).

As per claim 16, Pascucci discloses a system comprising means for downloading said local control interface control software image into said local control interface from an external source, whereby said local control interface control software images can be upgraded (col. 30 L15-48).

As per claim 18, Pascucci discloses a system wherein at least one of said local control interface and said application controllers is preprogrammed with a generic programming language and includes a means for downloading a control program to be run by said programming language to define operation of at least one of said local control interface and said application controllers (col. 33 L1-36, fig. 14 item #14-1, 14-15, 14-17, fig. 15 item #15-1, 15-3, 15-15, 15-11).

As per claims 17 and 29, they do not teach or further define over the limitations in claims 1-6 and 9-18. Therefore claims 17 and 29, they are rejected for the same reasons as set forth in claims 1-6 and 9-18.

5. Claims 7-8 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pascucci et al. (hereinafter Pascucci, U. S. Patent No. 5,550,980) in view of Pouchak et al. (hereinafter Pouchak, Pub. No.: 2003/0005086 A1) and further in view of Simmons et al. (hereinafter Simmons, U. S. Patent No. 6,349,883 B1).

As per claim 7, Pascucci discloses a system wherein control interface includes a means for grouping a plurality of application controllers into an occupancy group (into a group, col. 40

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L30-65), however Pascucci does not disclose a means for defining said occupancy status of each of said application controllers in a given group as a group (i.e. interpreted as indicating occupancy status of each group or zone).

Simmons, from the same field of endeavor, discloses an occupancy indication means for indicating individual occupancy status within respective ones of utility zones (col. 9 L27-51 and fig. 1, col. 5 L50-67 and col. 6 L51-55). Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Pascucci in view Pouchak, and further in view of Simmons, in order to include an occupancy indication means, since Simmons explicitly teaches and discloses the process of indicating individual occupancy status within respective zones.

One of ordinary skilled in the art at the time the invention was made would have been motivated because significant energy savings would have been effected by introducing the occupancy factor into the control system (Simmons, col. 4 L16-25, col. 3 L13-23).

As per claim 8, Pascucci discloses a system comprising a network server interface, said network server interface including means for monitoring and controlling operation of said control system over an Internet connection (fig. 16 and col. 32 L5-67, col. 26 L44-52, fig. 33 and fig. 37).

As per claim 31, Pascucci in view of Pouchak do not disclose a system wherein control interface includes a means for calculating a person count for at least one of said groups based on access entry and access exit information received by said control interface from an access control unit (i.e. a motion detector that detects the motion) and means for defining occupancy status of said controllers within said group based on said person count. Simmons discloses a system that

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includes motion detectors (a means for calculating person count) so that the occupancy status of the zones could be provided (col. 3 L13-24, col. 5 L50-60, col. 7 L1-26, col. 9 L28-60).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Pascucci in view of Pouchak, and further in view of Simmons, in order to include a means for calculating a person count for at least one group and defining the occupancy status of the group or controller. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 7.

As per claim 30, it does not teach or further define over the limitations in claims 7-8 and 31. Therefore claim 30 is rejected for the same reasons as set forth in claims 7-8 and 31.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Petite et al., U. S. Patent No. 6,891,838 B1.
- b. Myer et al., U. S. Patent No. 6,615,088 B1.
- c. Hunter et al., U. S. Patent No. 6,363,422 B1.
- d. Rasmussen, U. S. Patent No. 5,884,072.
- e. Keating et al., U. S. Patent No. 5,544,809.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Flex schedule 8 hr days (10.00am-6.30pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


November 18, 2005.


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER